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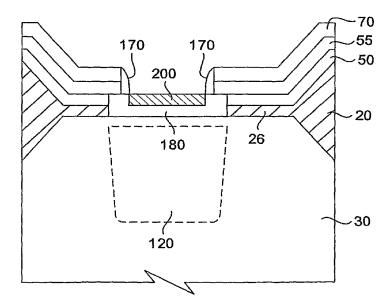
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(54) Title: A BIPOLAR JUNCTION TRANSISTOR HAVING A HIGH GERMANIUM CONCENTRATION IN A SILICON-GERMANIUM LAYER AND A METHOD FOR FORMING THE BIPOLAR JUNCTION TRANSISTOR



(57) Abstract: A method for forming a germanium-enriched region in a heterojunction bipolar transistor and a heterojunction bipolar transistor comprising a germanium-enriched region. A base having a silicon-germanium portion is formed over a collector. Thermal oxidation of the base causes a germanium-enriched region to form on a surface of the silicon-germanium portion subjected to the thermal oxidation. An emitter is formed overlying the germanium-enriched portion region. The germanium-enriched region imparts advantageous operating properties to the heterojunction bipolar transistor, including improved high-frequency/high-speed operation.





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